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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,509

10/27/2003

Eric A. Benson

AMAZON.015C1

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08/22/2006

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EXAMINER

MORRISON, JAY A

ART UNIT

PAPER NUMBER

2168

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,509

Applicant(s)

BENSON, ERIC A.

Examiner

Jay A. Morrison

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-42 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-15,17-28,30-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Durham (Patent Number 6,330,566).

As per claim 1, Durham teaches

“a server that responds to user requests for web pages, said server comprising a memory” (figure 6; column 1, line 46 through column 16, line 40);

“schema data stored in the memory of the server, said schema data specifying past and present schemas used to encode data structures into cookies stored on user computers” (figure 5; column 9, line 33 through column 10, line 59);

“a conversion component executed by the server, said conversion component configured to use the schema data to identify and decode the data structures encoded

within cookies received from user computers to generate temporary data structures within the memory of the server" (column 9, line 65 through column 10, line 11);

"and application code executed by the server, said application code configured to use the temporary data structures to customize web pages requested by the user computers" (column 9, line 65 through column 10, line 11).

As per claim 2, Durham teaches

"the conversion component is not specific to a particular type of data structure" (column 4, lines 12-48).

As per claim 3, Durham teaches

"the conversion component supports a plurality of different types of data structures" (column 4, lines 12-48).

As per claim 4, Durham teaches

"the schema data specifies the content and format of each of a plurality of data structures that are encoded within the cookies" (column 9, lines 32-65).

As per claim 5, Durham teaches

"the schema data includes, for a given data structure that is encoded within cookies, an identification of primitive fields of the given data structure and datatypes of said primitive fields" (column 4, lines 20-48).

As per claim 6, Durham teaches

“the schema data further includes address offsets of the primitive fields” (column 4, lines 20-48).

As per claim 7, Durham teaches

“the schema data includes, for a given data structure that is encoded within cookies, an indication of a range of schema versions for which the data structure is valid, wherein the conversion component uses said range to determine whether a particular data structure encoded within a cookie is valid” (column 4, lines 12-48).

As per claim 8, Durham teaches

“the schema data includes information about at least one data structure that is no longer in use” (out of date, column 10, lines 12-16).

As per claim 9, Durham teaches

“the conversion component uses the schema data to determine which of a set of the data structures encoded within a received cookie are to be decoded for use” (column 11, line 15-36 and column 15, lines 24-50).

As per claim 10, Durham teaches

“the conversion component uses the schema data to determine whether a particular data structure that is encoded within a received cookie is to be decoded for use” (column 11, line 15-36 and column 15, lines 24-50).

As per claim 11, Durham teaches

“the conversion component is an executable function that is called by the application code” (column 31, lines 15-32).

As per claim 12, Durham teaches

“the schema data is cached with random access memory of the server” (column 6, lines 8-17).

As per claim 13, Durham teaches

“the schema data is stored within a file in the memory of the server” (column 6, lines 19-36).

As per claim 14, Durham teaches

“the schema data is stored within a table in the memory of the server” (column 11, lines 52-67).

As per claim 15, Durham teaches

"the conversion component uses a checksum included within a received cookie to evaluate whether the cookie has been modified" (figure 3; column 8, line 2 through column 9, line 32; note: checksums are used to validate all network data).

As per claim 17, Durham teaches

"an encoding component that encodes data structures into cookies according to a current schema specified by the schema data" (figures 4-5; column 9, lines 32-52).

As per claim 18, Durham teaches

"(a) receiving, at a server, cookie data that has a data structure encoded therein, said cookie data received from a user computer" (figure 3; column 8, line 2 through column 9, line 32) "wherein the validity of the data structure is determined using information that identifies types of encoded data structures that are currently valid" (incomplete, column 8, lines 13-20);

"(b) determining whether the data structure encoded within the cookie data is valid" (figure 3; column 8, line 2 through column 9, line 32; note: when a network computer system receives data, the data is validated throughout the network transport stages);

"(c) if and only if the data structure encoded within the cookie data is determined to be valid in step (b), decoding the encoded data structure to reproduce the data structure within a memory of the server" (column 9, line 65 through column 10, line 11;

note: the data received over a network, after validation throughout the transport of that data, is determined valid).

As per claim 19, Durham teaches

“the validity of the data structure as determined in step (b) reflects whether the data structure is currently used by any applications running on the server” (column 9, line 65 through column 10, line 16).

As per claim 20, Durham teaches

“step (b) comprises identifying a version of a schema used to encode the data structure within the cookie data” (column 9, line 65 through column 10, line 16).

As per claim 21, Durham teaches

“step (b) comprises using schema data stored within the memory of the server to determine whether the data structure is valid” (column 9, lines 28-32).

As per claim 22, Durham teaches

“a plurality of data structures are encoded within the cookie data, and the method comprises determining which of the plurality of data structures should be fully decoded” (column 11, line 15-36 and column 15, lines 24-50).

As per claim 23, Durham teaches

"using the data structure as reproduced in step (c) to customize a web page requested by the user computer" (column 9, line 66 through column 10, line 12).

As per claim 24,

"step (c) is performed by executable code that is not specific to a particular type of data structure" (column 8, lines 5-20; note: executable handled different data structures in the reference).

As per claim 25, Durham teaches

"the data structure includes primitives of at least one of the following data types: 16-bit integers, 32-bit integers" (column 4, lines 12-48).

As per claim 26, Durham teaches

"A server system that performs the method" (figure 6; column 1, line 46 through column 16, line 40).

As per claim 27, Durham teaches

"A computer program that embodies the method of claim 18 stored within a computer readable medium" (column 6, lines 19-36).

As per claim 28, Durham teaches

"identifying a set of data structures to be encoded within the cookie data" (figure 2; column 7, lines 21-50);

"encoding the set of data structures within the cookie data according to schema data stored within a computer memory, said schema data specifying how the set of data structures is to be encoded within the cookie data" (figure 5; column 9, line 33 through column 10, line 59);

"and incorporating into the cookie data at least one of the following to facilitate extraction of the set of data structures from the cookie data: (a) a schema identifier, (b) the schema data" (figure 5; column 10, line 12 through column 11, line 67).

As per claim 30, Durham teaches

"incorporating a schema identifier into the cookie data, said schema identifier identifying one of a plurality of schemas used over a period of time to encode data structures within cookie data" (column 3, lines 5-20).

As per claim 31, Durham teaches

"the set of data structures is encoded within the cookie data using executable code that is not specific to a particular type of data structure" (column 8, lines 5-20; note: executable handled different data structures in the reference).

As per claim 32, Durham teaches

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“the set of data structures includes non-character primitives” (column 4, line 20-34).

As per claim 33,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 25 and is similarly rejected.

As per claim 34, Durham teaches

“incorporating a checksum into the cookie data to permit subsequent detection of whether the cookie data has been modified” (figure 3; column 8, line 2 through column 9, line 32; note: checksums are used to validate all network data).

As per claim 35, Durham teaches

“the method is performed in an off-line mode to reduce a delay experienced by a user” (column 9, line 65 through column 10, line 11; note: all web transactions are atomic by definition, with states maintained between transactions and processing done outside of the transactions, and therefore the processing is done off-line).

As per claim 36, Durham teaches

“A computer-readable medium comprising cookie data generated” (column 6, lines 18-36).

As per claim 37, Durham teaches

“A computer system configured to perform the method” (figure 1; column 5, line 64 through column 6, line 7).

As per claim 38, Durham teaches

“a computer-readable medium that stores a computer program embodying the method” (column 6, lines 18-36).

As per claim 39, Durham teaches

“storing schema data on at least one server computer of a web site system, said schema data specifying schemas used by executable software to (a) encode data structures within cookies for storage on user computers, and (b) decode said cookies to extract the data structures when the cookies are returned by the user computers” (figure 5; column 9, line 33 through column 10, line 59);

“and modifying the schema data over time to add data structures to, and remove data structures from, a set of data structures encoded within cookies by the executable software” (column 7, lines 21-50).

As per claim 40, Durham teaches

“the schema data is modified according to a set of rules to enable the executable software to decode cookies encoded using both past and present schemas” (column 3, lines 5-20).

As per claim 41, Durham teaches

"the rules are enforced by a management layer" (personalization process, column 7, line 22-29).

As per claim 42, Durham teaches

"the executable software is not specific to a particular type of data structure" (column 8, lines 5-20; note: executable handled different data structures in the reference).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Durham (Patent Number 6,330,566), as applied to claim 1 above, and further in view of McDonough et al. ('McDonough' hereinafter) (Patent Number 5,991,878).

As per claim 16,

Durham does not explicitly indicate "the conversion component applies a decryption algorithm to encrypted information contained in the cookies received from the user computers".

However, McDonough discloses "the conversion component applies a decryption algorithm to encrypted information contained in the cookies received from the user computers" (column 4, lines 44-56).

It would have been obvious to one of ordinary skill in the art to combine Durham and McDonough because using the steps of "the conversion component applies a decryption algorithm to encrypted information contained in the cookies received from the user computers" would have given those skilled in the art the tools to improve the invention by insuring that only authorized users have access. This gives the user the advantage of having more secure data.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Durham (Patent Number 6,330,566) as applied to claim 28 above, and further in view of Goldberg (Patent Number 5,907,847).

As per claim 29, Durham teaches
"cookie" (column 4, lines 12-20).

Durham does not explicitly indicate "incorporating the schema data into the ... data".

However, Goldberg discloses "incorporating the schema data into the ... data" (column 3, lines 39-49).

It would have been obvious to one of ordinary skill in the art to combine Durham and Goldberg because using the steps of "incorporating the schema data into the ... data" would have given those skilled in the art the tools to improve the invention by insuring the integrity of the data. This gives the user the advantage of being able to immediately interpret the data.

Response to Arguments

7. Applicant's arguments filed 7/14/06 have been fully considered but they are not persuasive.

With regards to Applicant's argument that Durham does not disclose "schema data stored in the memory of the server, said schema data specifying past and present schemas used to encode data structures into cookies stored on user computers", it is noted that Durham discloses that user settings, a version number which is equivalent to the schema version number, and various other customization settings are encoded in the cookie (figures 4 and 5, column 9, lines 39-40). Durham even discloses directly in the claims (column 38, claim 5) that there these elements comprise a cookie data structure. These elements are also functionally declared by Durham (column 9, lines 35-59) as well as stored in the database (column 9, lines 39-40; column 10, lines 44-46), so data structures are disclosed by Durham.

With regards to Applicant's argument that Durham does not disclose "a conversion component executed by the server, said conversion component configured to use the schema data to identify and decode the data structures encoded within cookies received from user computers to generate temporary data structures within the memory of the server", it is noted that Durham teaches decoding the data structures that were encoded in the cookies (column 10, lines 9-11) as disclosed previously (column 9, lines 39-40). Therefore Durham discloses the limitation.

With regards to Applicant's argument that Durham does not disclose "receiving, at a server, cookie data that has a data structure encoded therein", it is noted that Durham teaches decoding the data structures that were encoded in the cookies (column 10, lines 9-11) as disclosed previously (column 9, lines 39-40). Durham even discloses directly in the claims (column 38, claim 5) that these elements comprise a cookie data structure. Therefore Durham discloses the limitation.

With regards to Applicant's argument that Durham does not disclose "determining whether the data structure encoded within the cookie is valid", it is noted that Durham discloses the server recognizes that the cookie contents were incomplete or damaged (column 8, lines 15-17). Therefore Durham discloses the limitation.

With regards to Applicant's argument that Durham does not disclose "identifying a set of data structures to be encoded within the cookie data", it is noted that Durham discloses that user settings, a version number which is equivalent to the schema version number, and various other customization settings are encoded in the cookie (figures 4 and 5, column 9, lines 39-40). Durham even discloses directly in the claims

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(column 38, claim 5) that there these elements comprise a cookie data structure. These elements are functionally declared by Durham (column 9, lines 35-59) as well as stored in the database (column 9, lines 39-40; column 10, lines 44-46), so identifying data structures to be encoded are in fact disclosed by Durham.

With regards to Applicant's argument that Durham does not disclose "encoding the set of data structures within the cookie data according to schema data stored within a computer memory, said schema data specifying how the set of data structures is to be encoded within the cookie data", it is noted that Durham discloses that user settings, a version number which is equivalent to the schema version number, and various other customization settings are encoded in the cookie (figures 4 and 5, column 9, lines 39-40). Durham even discloses directly in the claims (column 38, claim 5) that there these elements comprise a cookie data structure. These elements are functionally declared by Durham (column 9, lines 35-59) as well as stored in the database (column 9, lines 39-40; column 10, lines 44-46), so how a set of data structures are to be encoded are in fact disclosed by Durham.

With regards to Applicant's argument that Durham does not disclose "storing schema data on at least one server computer of a web site system, such schema data specifying schemas used by executable software to (a) encode data structures within cookies for storage on user computers, and (b) decode said cookies to extract the data structures when the cookies are returned by the user computers", it is noted that Durham discloses that user settings, a version number which is equivalent to the schema version number, and various other customization settings are encoded in the

cookie (figures 4 and 5, column 9, lines 39-40). Durham even discloses directly in the claims (column 38, claim 5) that these elements comprise a cookie data structure. These elements are functionally declared by Durham (column 9, lines 35-59) as well as stored in the database (column 9, lines 39-40; column 10, lines 44-46). It is also noted that Durham teaches decoding the data structures that were encoded in the cookies (column 10, lines 9-11) as disclosed previously (column 9, lines 39-40). Therefore Durham discloses the limitations.

With regards to Applicant's argument that Durham does not disclose "modifying the schema data over time to add data structures to, and remove data structures from, a set of data structures encoded within cookies encoded within cookies by the executable software", it is noted that Durham discloses the server modifying the cookie before writing it back to the client (column 8, lines 1-5), and therefore additional user settings may have been added to the cookie (column 9, lines 60-65). Therefore Durham discloses the limitation.

8. Regarding the remaining Applicant replies, the Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

With regards to Applicant's argument that Durham does not disclose "schema data [that] includes, for a given data structure that is encoded within cookies, an identification of primitive fields of the given data structure and datatypes of said primitive

fields”, it is noted that no argument is given by the Applicant and therefore the citation listed in the art rejection above stands as given.

With regards to Applicant’s argument that Durham does not disclose “uses the schema data to determine whether a particular data structure that is encoded within a received cookie is to be decoded for use”, it is noted that no argument is given by the Applicant and therefore the citation listed in the art rejection above stands as given.

With regards to Applicant’s argument that Durham in view of Goldberg does not disclose “identifying a set of data structures to be encoded within the cookie data” or “encoding the set of data structures within the cookie data according to schema data”, it is noted that no argument is given by the Applicant and therefore the citation listed in the art rejection above stands as given.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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